

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

Form Bi-689

FIELD DIARY

Mr. Vernon Bailey

Minnesota,
(Official title.)

Period, May 30 to Aug. 7, 1932

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Dr. R. G. Greene, Mallard Hall, 219 M.

Dr. Henrici, Cushing, Minn. R.F.D.

Hilman Joki, - Carlton

Geo H. Johnson, Washkish, Minn. (trapper)

R. F. Smith, fire guard, Washkish, Minn.,
home at 1923, W. ^{Third} ~~Fourth~~ St. Duluth

Walter Hunsel, Washkish, Minn. Game Warden

Oliver Larsen, fire guard, near Duluth.
summer at Schroeder.

Paul Newcom, Schroeder, Grand Marais

R. A. Zeller, Supervising, Ely, Minn.

A. J. Allen, Bearskin Lake, Ont. Box 337

Grand Marais, send boxes full
mushrooms. Taxidermy, live trapping.

Sam^r Anderson, Hutchinson, Minn.

May 30, Monday, 1932

Left Washington 8 P.M., B & O
for St. Paul, Minnesota to go with
C. M. Aldous and others over the
northern part of the state to study
game conditions, mainly to get
at methods of study and to
pass on to younger men the knowledge
and experience of my 50 years of
field work.

May 31 - A pleasant morning
in southern Ohio, enroute
to Chicago where I arrived at 2 P.M.
Went to Field Museum on arrival
and back to C & NW station in
time for 8:20 train to St. Paul.
Pleasant day, good trains
and beautiful country.

June 1 1932

Arrived St. Paul 7:25 AM
after a good breakfast on
train and went to University
Farm School where I met
Aldous at 8:30.

Also met Dr. King and
Dr. Green and Raphael John

Could not see Dr. Roberts as
he was off on a bird class
Mr. W.B. Henderson and Mrs.

Stief came at 1 PM we
went with them to the fish and
game commission to see Thad
Sniper and had a good visit
with him regarding game conditions
in northern part of state.

Then took bus to Elk River
and staid over night until
Mr. Aldous should pick me
up there on his way north

June 3, Alderis arrived at 10 AM and we drove to Lake Alexander where Dr. Green has his biological laboratory and set traps till after dark.

His camp is on the island out in a big beautiful lake and we set traps on the island as well as the mainland. Got a *Geomys bursarius* and ~~three~~ *Microtus* before dark and set a pole trap for owl on island.

Birds and mammals are abundant and the snowshoe rabbits have eaten about all they could on the island, killing most of the young pine of 3 species, tamarack, aspen, willow, maple, red oak, and sumach, and many other species.

Mr. Cox camp at 4 PM.

June 4, Caught a lot of Peromyscus
but nothing else except a Gapus.

Made up a few specimens for
Dr. Green to keep at the station
and to show his men how to do it.

Then went over a big tract
of woods west of the lake where
he is making studies of
rabbits and other native life
in relation to diseases. Found
a bunch on a hill top and packed
with the Greens, going west
to Wadena and north to
Park Rapids and Lake Itasca.

Sit before trap just north of
Schoolcraft Island.

Saw deer and elk, raccoon
and snowshoe rabbits, woodchucks
chipmunks and red squirrels.

June 5, Sunday,

The beavers put popple branches in the trap so the jaws did not close and got out. Reset trap in another place and at 9 PM found it sprung and empty.

Went up west arm of lake and out to a much used beaver lake where the aspen is cut as far back as they dare go, about 100 to 150 yards. Most of the beavers are gone somewhere else. In P.M. went over to Squaw Lake in NW corner of park and found many beavers in and above and below the lake but generally they have cut most of the aspen within reach of the shores. Saw two very large old beavers in the pond above Squaw Lake and some of the finest damns I ever saw.

Main at Stasea Lake June 4 56.

Moose, one in park

Elk, about 40 in park, poor at night

Deer, abundant, too many near lake, not too many further back, no deer this except along lake shores and abundance of feed.

Snowshoe rabbits. Abundant and tame

Cottontails - common

Gray squirrels, imported, doing well

Red squirrels, a few and very tame.

Flying squirrels

Chipmunks, common

Franklin ground squirrels

Woodchucks, common. very dark brown

Beavers, numerous, food mostly cutters should be regulated.

Muskrats. Common. go in beaver dams

Skunks,

Mink

Weasels

Bats

Saw lots of deer and one small very young fawn that had been captured. Saw many snowshoe rabbits, woodchucks and three porcupines; including one very small and young, probably a week or two old. He cried or squeaked when I caught him under my cap and was so scared he would not let me pet him. Got my cap full of quills of sticks some in my hands and legs. He was very black all over. Saw two big porcupines up a big white pine tree and saw a small white pine 50 feet high, almost completely barked from near the bottom to the top. One tamarack was also seen almost denuded of bark.

Saw a few muskrats, one in beaver dam

Birds, Lake Itasca Lake. June 4 to 6.

Loons - a pair

Dovechick - 1 heard?

Blue heron. com. Nest colony to south

Bittern

Ruff Grouse, com. during

Blue wing teal, 1

Barn owl, heard

Sparrow hawk. 2

Marsh hawk

Turkey buzzard. 1, com

Kingfisher 1

Pileated woodpecker heard

Dryobates com

Red head,

Sphyrapicus

great crest

Phoebe & nest

Empidonax

Black terns com.

Killdeer a few

Nighthawk " "

June 4, Monday, Itasca Lake,

Failed again to get the beaver
and had to give it up as we can
not wait longer.

Left Itasca Lake at 9 AM,
and drove to Bemidji, then to
Black Duck and north to Mankato
on Red Lake.

The caribou are said to be up
north of Red Lake and over
near Pine Island NE of here.

Game Warden Walter Hume says
he saw 4 last March about
5 miles north the north shore of
Red Lake, north of the mouth of
Saw River. He thinks there are
6 or 8 and possibly 10 in there
now and we are going to see
tomorrow, starting at 5 AM.

A warm day, 90 at 2 PM.

lake lakes

Purple martin, com. breeding, tons,
Barn swallow
Bank swallow
Horned lark, a few
Bluejay, "
Crows, young in nest,
Redwing com
Brewer's blackbird "
Cowbird "
Purple grackles ?
Mockingbird, com - -
Oriole "
Orebird oriole a few
Vireo - vireo, com
" Bluebird ? a few
Nuthatch vireo "
Yellow warbler com
Redstart "
Maryland "
House wren "
Short bill of marsh wren "

Chewink com
Rosebreast ?
Goldfinch, com
Song sparrow "
Chipping " "
White throat " in swamps, many
Robins "
Thrush - very ? a few
" - hermit, com.
Kingbird com
Swift "

Mr. Foy who has lived on
Pine Island for many years
says he has seen 150 caribou
around there 30 years and
he has seen as many as 18
up north of Red Lake where we
are going tomorrow. He is
old and rather feeble and remembers
better long ago than recently.
Says he never knew of a prairie
or woodland in this state
but has seen lots of water
and fishers and thinks there
are a few now.

Deer are pretty common here
and tracks and deer are frequently
seen. One of the

Trapper Geo. H. Johnson -
Saw ^{7 also captured} & captured a ^{kind of} 8
about 3 weeks ago, on Rapid River
18 miles N + 18 west of Washburn,
probably all there are in that
section.
157, 32, Ser. 7.
Now having young.

Moose are numerous

Many timberwolves in the
Carabon vicinity and 8 of them
still there, one caught -

Red foxes abundant in 1905
to 11. They poisoned for fox.
Some fellows had set 100
baits for foxes

Red Lake

Waskish, Minn., June 4-7

Swan, abn on Red Lake in migration
Canada geese, a few in migration
Mallards, a few, 1 old ad 7 yg, in ditch
Blue wing teal, 1
Herring gulls 3
Black tern, 1, a few
~~Blue tern~~
Blue heron, 2
Killdeer com.
~~Spotted sandpiper~~
Pinnated grouse, a few
Sharpshin " 20 seen.
Spruce grouse, a few
Ruffed grouse, com.
~~Spotted hawk~~
Marsh hawk 1
~~Broadwing hawk~~
Great horned owl, pilot + feathers
Dryobates
Sphyrapicus 1
Red hooded flicker. 1
Flicker
Crows 1

June 7, Tuesday, Waskish,

Drove along north shore of North Red Lake, about 18 miles near to mouth of Deer River, then straight north on foot along the main ditch for 5 or 6 miles to Hilman Lake, where the caribou lives.

This great swamp country has been ditched on section lines both ways through an enormous swamp country. For about 3 miles back it has all burned over and generally a foot to two feet of peat burned out. Still further back it is native swamp of hatter's hay, Labrador tea, dwarf laurel, cranberry, sphagnum and scattered small black spruce and small tamarack pitcher plants, sedges, cotton grass and mosses and a little poor grass

Red Lake

Phoebe + 3 nests
Kingbird
Great Crested, heard
Empidonax, heard,
Amphispiza garrulus 4
Barn swallow com.
Purple Martin "
Crows "
Redwing "
Cowbird "
Meadowlark "
Baltimore Oriole "
Orebird " a few
Tanager "
Rosebreast grosbeak, "
Pine grosbeak, "
Chewink ~~com~~ a few near Bemis
Zonotrichia albicollis, com.
Vesper sparrow a few
Savannah sparrow a
Song sparrow "

Found caribou tracks at 3 miles
back and saw two caribou
and lots of tracks at 5 miles
back. Saw a bull moose, two
cows and 3 calves.

lots of sharp tailed grouse, one mated
with 7 young, a teal and many
sparrows.

Cloudy and cold. rained
a little at noon.

Rough walking on ditch bank
and hard walking in spruce

Went up Judicial Ditch No. 30
to section of lateral No. 1.
in Sec 5, 155, 32,

Hilman Lake in SE 1/4 Sec (near center Sec)

Sec. 32 - Twp 156 - R 32

2. 2. 1. 1.
Red Lake

Chipping sparrow	a few
Field sparrow	"
Juncos	com -
Goldfinch	"
English sparrow	"
Red eyed vireo	"
Maryland yellow throat	"
Yellow warblers	"
Red start	"
Marsh wren, 5 bill,	1
House wren	a few
Blue jay,	1 heard
Robin	abu.
Grackles	3
Catbird	said to be com.
Bobolinks	2

Plants Woods,

Pinus banksiana	com
" resinosa,	"
" strobus	com.
Juniperus Aspen	abu.
Birch	com
Balsam poplar	"
Betula alba	"
" glandulosa	"
Basswood	"
Birch	"
Red oak	"
White ash	"
Black ash	"
Maple, 3 sp.	"
Boxelder	? -
Picea mariana	abu.
" nigra	"
Abies balsamea	"
Thuja	common locally
Mountain ash	com.
Pink cherry	"
Choke cherry	"
Amelanchier	"

Red Lake

Willow - many, abas.
 Hatties bog "
 Lobelia etc. "
 Kalinise "
 Cassandra "
 Cranberry "
 Arctostaphylos uva-ursi "
 Pitcher plants "
 Sphagnum "
 Polytrichum juniperinum "
 Eriophorum nigrum in one place
 Carex stenosepala com
 " canadensis "
 Bedstraw / raph. "
 Ribes "
 Galaxia "
 "

Range Red Lake
 8 reported, 2 seen, tracks com
 Moose in big swamp 9 seen, 2 calves
 Deer, 2 seen, about 10 reported
 Snowshoe Rabbit com
 Porcupine
 Woodchuck holes com
 Franklin's ground squirrel 1
 Beaver 1 in
 Muskrats com.
 Mink - scarce, 1 fresh sign
 Wolf 9, 1 caught, old sign, winter
 Coyote, tracks com. near lake
 Raccoon, scarce at lake
 Grouse a few on sandy ridges
 Fisher, said to be a few
 Marten, probably all gone,
 Wolverine, most heard of
 Panther " " "
 Bear, a few, one ♀ + 2 cubs near town
 Red squirrels, com.
 Fox, all gone, poisoned for fur, 1911
 Otter, a very few

June 8. Left Red Lake 9 AM,
returned to Bemidji and to
Cass Lake, Cool and clear,
and the country is beautiful after the
rain, dense with verdure and
bright with flowers.

Song birds are abundant

Little farming but some fields of
grain and many gardens.

Some good clovered alfalfa
fields and a few dairies.

Very little lumbering.

Many summer cottages and
resorts along the lake shores.
and many beautiful lakes.

At Cass Lake stopped at
Mrs. C. M. Taylors, a pleasant
and inexpensive place to stay.

Went out to Aldous' rabbit pens
but found most of the rabbits had
escaped. He will have to catch
them over again.

June 9 Cass Lake,

Went out about 10 miles NE of Cass Lake on the Burnt Lake, Tokant road to the Jack Smith Plantation planted to young Norway pines in the same place I went over in Sept. 1930. About 100 acres of burnt over land on sandy low ridges were set out and about 2 percent of the young trees are living as far as 1 to 2 feet high. Some dead ^{pine} trees still standing have been ripped by snowshoe rabbits and a few by deer. Most of the dead trees found ^{kind of} ~~have~~ died of death as have many of the grasses, willows, ^{other willows,} hags, and cherries, jessy tea, pin cherry, choke cherry, rose and other bushes.

Grass and low vegetation is dense and the brush is coming in too thick for the good of young trees but the pines that have lived so far are pretty safe.

Cross Lake

Deer	com
Snowshoe rabbits	"
Cottontails	a few
Gray squirrels	"
Red squirrels	com
Chipmunks	"
Citellus, Thimothus	a few
Citellus pennsylvanicus	"
Woodchucks	"
White foot mice	com
Microtus	"
Eutamias	"
Muskrat	"
Bear	now near
Porcupine	a few, no signs
Goats	com.
Skunks	"

Snowshoe rabbits live in the tamarack and spruce swamp nearby and have cut some small park pines on the open high ground but only one of probably a hundred noways had been ripped at the top by rabbits.

A few cottontails also occur but no damage noted.

Deer are common and a few tracks seen but no fresh ripping on the Norway pines. They also were browsing on Ceanothus.

Amelanchier and hazel, very little on aspen or willow.

Ceanothus is abundant and a favorite food, as is Amelanchier.

A few pocket gophers till are scattered over the sandy uplands but no damage noted.

Probably a few ground squirrels and chipmunks and plenty of Microtus.

in the grassy marshes.
Red squirrels only in the swamp.
Seed trees few and widely scattered.
Very little of the damage can be
attributed to animals, mostly
to poor planting, drought and
cover competition.

The land should be replanted
after burning over or in
broad shallow furrows of a
12 inch breaking plow.
Trees should be planted to
allow for a 50 percent loss, or
more. The soil is ideal for
heavy timber growth as shown
by old forest trees.

Went to rabbit pens in P.M.
and over the marked trees in natural
woods to check damage by deer and
snowshoe rabbits. Found a moderate
loss but not very serious -
Set traps -

Cass Lake June 9-10

Zoo	a few
Goldeneye 1.	
Golden eye ducks	3
Ringneck "	3
Scalp ♂	1
Bluewing teal	2
Black tern	abn, nesting
Pelican	1 spotted June 9
Ruffed Grouse	com, nesting, drinking
Ringneck pheasant	1 ♂,
Buteo	
Bubo	
Pileated woodpecker,	heard
Dryobates	"
Colaptes	com
Kingfisher	1
Cuckoo	heard
Kingbird	com
Phoebe	"
Empidonax	com
Great crest	heard

Barn swallow	com
Roughwing	"
Martin,	breeding in trees, com
Tree swallow	" " "
Beau Thrasher	com
Catbird	" nest
Hermit Thrush	"
Vireo	a few
Blue Jay	com.
Crow	com
Grackle	a few
Redwing	com
Cowbird	"
Mockerlark	"
Oriole	"
Tanager	"
Red-eyed vireo	"
Warbling vireo	"
House wren	"
Green bird, 1 heard	
Yellow warbler	" nest 4 eggs.
Redstart	"
Mockerlark green throat	"
White throated sparrow	a few
Song sparrow	"

Cass Lake June 9-10

Cass Lake

Chipping sparrow, com & nesting
Veery sparrow "
Gold finch a few

June 10, Cass Lake,
Out to traps, got 2 *Peromyscus*
and 2 *Microtus pennsylvanicus*.
Wrote reports all afternoon

June 11, Got mail and started for
Ely, via Grand Rapids, Hibbing,
Virginia City and Tower, arriving
at Ely about 4 PM. Saw forestry
men and talked over plans
for working this part of the state.
Put up at Forest Hotel.

June 12, Sunday.

Went out to Newton to see Bill
Hansen, District game warden
and got much information on
moose and caribou and deer and
beavers. He is a very intelligent
man and a good warden. I showed
him how to catch beavers alive in
1922. Set traps.

Cass Lake

Ely, Minn., June 13-15 -
Loon - several heard
Dabchick, - one heard
Herring gull, 2 on Ninamoose Lake.
Golden eye, 15 seen on river June 13.
Eggs, Terns, a few.
Ruffed grouse, Common, eggs seen April 13.
Spruce grouse, A few in places.
Sharp tailed grouse, A few here.
Fish hawk, one on Ninamoose Lake, June 15.
Golden eagle, one mounted
Bald eagle, a few, photo of 1/2 & 1 mounted.
Butor lineatus, two seen.
Goshawk, A few, one mounted.
Bubo, one dead in road, half grown
snowshoe rabbit in stomach.
Marsh hawk, one on road here.
Kingfisher, a few, 2 nests.
Pileated woodpecker, a few. scarce.
Flicker, com.
Dryobates, a few
Cuckoo

June 13, Ely,

Drove down to Berch Lake
Hot Iron Lake and a circle
of tree plantations to see the
effect of rabbits and deer and
porcupines and mice on the
young conifers that had been
set out under varying
conditions.

Rabbits and deer had
injured and killed many
young pines and spruces
and in places had taken
more than half the trees.
In other places very few.

In one plantation of white
and Norway pines the porcupines
had killed or seriously injured
about half the trees on 40 acres
or more. I counted 80 trees
that were practically killed.

birds - Ely, Minn. June 13-15 -

Kingbird, com

Contopus borealis, 1 on Moose R. June 15.

Phoebe, com. nestling.

Empidonax "

Perisoreus, a family on Portage R. June 15.

Blue Jay, com.

Crow, "

Purple grackle, "

Redwing, "

Crowbird, "

Meadowlark, "

Orcas a few

Scarlet Tanager, "

Red eye vic, com

Warbling, a few

Chimney swift, com in Ely

Nighthawk, "

Purple martin, "

Barn Swallow, "

Bark, "

June 14, Ely, Minn.

Went to traps early and got 2 *Synaptomys*, 2 *Microtus pennsylvanicus*, 1 little *Sorex* and a lot of *Blarina*, all out in or near the sphagnum swamps about 4 miles SE of Ely.

Returned to Ely, got grub and started on the road north of Burntside Lake and on to the ^{Portage} Moose River Cabin on the St. Croix Trail. After lunch drove on to Cold Springs station some 8 or 10 miles and then returned to the Portage River Cabin and set the beaver traps and made up specimens.

Saw many deer, lots of moose tracks and some bear tracks.

~~21-11-11~~ Ely, Minn.

House wren, com
Shortbilled nuthatch, 1 heard on road to Ely,
Winter wren, 2 heard on Moose River,
Cat bird, 1 seen
Brown thrasher, seen on road in,
Robins com.
Bluebird, 1 on road in.
Ovenbird, com.
Maryland yellowthroat, com.
Yellow warbler abn.
Redstart, a few
Rosebreasted grosbeak, seen
Chimney ?
Goldfinch, com.
Whitethroat, "
song sparrows "
Chipping sparrows - 1 heard, 1 feeding.
Veery sparrows, a few along road.
English sparrows, abn.

June 15. Portage River Cabin.

No beaver in trap, took it up.
Drove west $3\frac{1}{2}$ miles to Moose River
and took a canoe down to Mina Moose
Lake, about 3 miles, probably 4 by
creeks and turns. A beautiful lake,
one cow moose, many tracks,
4 deer and hundreds of tracks.
Then beaver houses along Moose
River and 19 dams, mostly cut
through for boats. Saw through
12 of them and carried canoe over 7.
Probably 10 beavers along river
now but should be 100.
Lots of muskrat and mink tracks
One porcupine and several tracks
One porcupine climbed our cabin
screen door in night.
Chipmunks & woodchucks not seen
squirrels common.

Canada jays, ^{blue jays,} ⁱⁿ ^{Clear} ^{Hood} birds,
northern warblers, olive-backed
flycatchers, winter wrens, juncos,
white-throated sparrows, tanagers,
spruce grouse, ^{Rock} grouse, and many
other birds were seen or heard or
reported. The country is pure
Canadian zone in fauna and
flora.

Porcupines, woodchucks, muskrats,
beaver, snowshoe rabbits,
Eutamias, red squirrels, common

Most interesting country,
beautiful lakes and streams and
timber. Lots of fish and game.
Bear traps at Postage River
No wood ticks, many mosquitoes
and gnats

~~Grand Marais - Grand Marais Lake Sawbill Lake~~

Loons, a few nesting

Sheldrakes, a pair, nest here

Blacks Mallards, and yg. on Harriet Lake,

Great Blue Heron, a colony on nest lake. a few here

Owls, great horned & great gray spotted

Pileated woodpecker, heard

Flicker com.

Ruffed grouse, com.

Spruce grouse, a few

A hawk nest at Lake Coburn.

Empidonax, heard

Ridgway vireo, singing

Crow, a few, nesting

Canada Jay, a few

Blue Jay

Grackle

Hermit Wren com.

Veery a few.

Winter Wren

House Wren

Song Sparrow com.

White Throat "

June 14, Ely.

Went to see Dr. E. J. Thompson
and talk over moose ticks.

He had many specimens and
has had the ticks identified as
Oenoseius albipictus.

Has many egg masses not yet
hatched. Does not know as

the ticks kill moose by draining
vitality or by disease,

says the ticks all have the
moose in May. Wants to

know intermediate hosts of
ticks. 15 dead moose reported this year.

The dead moose should be
mapped and dated to define infested
area. Many different organizations are
studying the moose and the general

Drove down to Halfway Ranger Sta.

and examined the natural reproduction
under conditions that had been much
injured by rabbits and deer.

Had dinner there,

~~From Little Marais to Sawbill Lake~~

Collected Salix pedicularis in sphagnum swamp south of Ely, abundant in all the swamps, shrub 4 feet high, looks like Vaccinium.

Then drove on to Finland and Little Marais and Schroeder and back north about 25 miles to Sawbill Lake at a new cabin being built for a ranger station.

A beautiful lake with clean birch shores, some beavers, 4 beaverhouses seen, a pair of loons nesting and pulling. Moose come out on the shores and grass abundant, Pickers numerous, caught 6 after supper.

Porecupine swimming lake.

Then country on next lake, Altoona Lake. Deer broke window & ate fruit, shot by ranger. Some fisher, no marten or weasels or raccoons, some mink & weasels, lots many wolves and probably some coyotes. No Canada lynx but a few bobcats.

~~at the same time~~ Sawbill Lake

Grand Marais + Juniper Lake.

Loons, a few breeding
Gulls, br. breeding on islands in L.S. a few on lakes
Mergansers, a few breeding
Am. Golden eye, " "
Blue jays, a few.
Ruffed grouse + yg. com
Spruce grouse, several
Bald eagle, 1 near Little Marais.
Fish hawks, pairs & nest, Bearskin Lake.
Goshawks, 5 at Bearskin L. ?
Horned owl, reported
Pileated woodpecker, 2 heard on Bearskin L.
Flickers, com.
Kingfisher, a few
Canada jay, "
Blue jay - com.
Crow
Grackles a few.
Swift, a pair in Grand Marais.
Purple Martin a few
Tree swallow "

June 17 Sawbill Lake.

Fires at 6 picked for breakfast,
delicious. Entomias com.

Drove back to Jaycee crossing and
took the spur east to Cascade
where we staid to lunch

9 moose found dead around Cascade
last spring, supposedly from ticks.
Got a cow moose skull. Could not find another.
Saw two deer. No reindeer tho a
few are running at large near
J.C. Crossing. All badly infested
with cuterebra and some have died
of ticks.

The Cascade country has been
lumbered and burned recently
and is very open. Many deer
and moose.

The fire warden at Cascade in flying
up to Juniper this forenoon saw 20 moose.

We saw and photographed two pine
buds on return to J.C. Crossing.

~~Grand Marais + Gunglitz Lake,~~
~~Grand Marais + Gunglitz~~
Phoebe, breeding at Bearskin

Empidonax, com.

Winter wren, a few

House wren, "

Vireo, red eye, com

Tanager, a few, Northern Light Lake.

Over bird Yellow warbler com.

Thrasher, Hermit com, a few

Robins, com.

Pine grosbeak, reported in winter, Bearskin

Juncos, a few

Chipping sparrow "

Swamp sparrow "

Song Sparrow com.

White throat. "

Drove back to Schroeder on
the shore Lake Superior and then
east 32 miles to Grand Marais
Very hot at JC Crossing but
cold along Lake shore.

Stopped at Arrowhead Hotel,
Ed Munstedt proprietor.

Airplane came in. landed in
lake to load up with supplies for
fire fighters back in forest on other
lakes. The men mostly out on
fire fighting lines.

Grand Marais to Gunflint		
Grand Marais to Gunflint		
White pine	abn	
Norway pine	"	
Jack pine	"	
Spruce - black & white,	abn	
Abies	"	
Larix	"	
Thuja	"	
White birch	"	
Shrubby birch	"	in swamps
✓ Aspen	"	
Balsam poplar	"	
✓ Salix	"	many species
Alder	"	
Ash	"	
✓ Fr. Mountain ash	"	
✓ Pinus	"	
Chokeberry	"	
Servier berry	"	
✓ Cornus canadensis	"	
✓ " Lonicera	"	
Acer rubrum	"	
✓ Acer spicatum	"	

Thurs 18 Grand Marais, Saturday.
 Rained hard in night and well
 over forenoon. Cold and chilly.

Drove north to Northern Lights
 Lake, Bearskin Lake, Hungry
 Jack and Gunflint lakes.

Saw beautiful moose cabins on
 Gunflint and Hungry Jack lakes
 and a nice little cabin on Bearskin
 kept by Mr & Mrs. A. J. Allen.
 Box 337 Grand Marais.

Stayed at ranger cabin at
 Bearskin Lake and went up lake
 fishing and got moose skull at
 east end.

Saw some deer along road
 Moose said to be common.

Pure Canadian zone all the way. some
 good forest but mostly second growth
 of birch and popple and pinus.

Grand Marais to Quinquet

Grand Marais + Quinquet Lake.

Rose	abn.	
Red raspberries	"	
Thimble berry	"	
Strawberry	"	
Highbush Cranberry	"	
Viburnum	com.	1
Elderberry	"	
Blueberry, 3	"	
Hazle	"	
Beakberry	"	
Lemonree 2	"	
Sweetgale	"	wood stores
Lubralortea	abu.	in swamps
Leathusleaf	"	"
Laural	"	"
Andromeda	"	"
Cranberry	"	"
Linnaea	"	on uplands
Gaunthoria	"	"
Chimophila	"	"
Pyrola	"	"

June 19, E. Beeskin Lake.

Got moose skull and 2 tarties
boiled. Saw 3 moose on Northern
Lights Lake, all out in water.
One swam half a mile and went
under of tree and fed on bottom.
They stay under 10, 15, 20, & 30
seconds while feeding.
Swim in mud & water, feed
under water and go out of sight.
Feed on lilies & potamogeton &
other water plants.

Powerful, graceful if ungainly
and prehensile in appearance.

Drove to Port Arthur in P.M.
arriving at 8 o'clock at Hotel
Mariagge but could get no
information about boat to Isle
Royal. Same kind of country
all along north shore of lake,
timber mostly popple & birch & spruce
& fir.

Grand Marais + Quinault Lake.

Clintonia	abu. in woods
Cypripedium	com. "
Pteridium	"
Cladonia	abu,
Sphagnum	"
Hypnum	"
Polytrichum	"
Urena	"
Cowslip	" in blossom
Buttercup	" "

Apple, in blossom at Grand Marais			
Chokeberry	"	"	"
Sandhills	"	"	"
Snowball	"	"	"
Lilac	"	"	"
Spirea	"	"	"

June 20 Port Arthur, Canada.
 Couldnt get a boat to Ish Rogn
 until June 27, and couldnt
 take a private trip because there
 is no customs office on the island
 and we are not allowed to land
 from Canadian soil. Will have
 to return to Grand Marais or
 Duluth to go over and may
 have to give up the trip.

A remarkable range of volcanic
 mountains along the Canadian shore
 of Lake Superior stand out in much
 worn turrits and buttes and necks
 of basalt over which the glacial
 ice has plowed and ground away
 all but the hardest parts -
 leaving picturesque cliffs and
 towers and headlands.

Got baggage left at Grand
 Marais and drove on to Duluth,
 arriving at 7 P.M. Left

Port Arthur at 10:30 Am and
stopped half an hour at Pigeon
River for lunch and on leave at
Grand Marais.

The most scenic part of the
trip is along the lake shore
from Little Marais to Duluth,
with high shores and headlands
rocky points and islands and
many canyons, falls and rapids.
The road keeps near the shore
and is well built. The country
is fresh and green and the air
cold and snappy. There are
some little farms and towns
but mostly cottages and resorts.
It is a fine summer country
but no place for me in winter.
217 miles from Port Arthur to
Duluth.

June 21 Duluth to Elk River
Left Duluth at 8 AM
and drove out to
and beyond to the Forest
Experiment station of the U of M
where Dr. King has his grouse
laboratory for studying
diseases and natural enemies
of the ruffed grouse. Dr King
was not there and his last
young grouse had died so
we did not stop long.
Continued on to Mission Creek,
then west and south to Mellen
where I shipped the two moose
heads and then on to Elk
River where I stopped for the
night and took the first
train to St. Paul next day.
Arrived at Elk River at 4 PM
Had supper with Leslie Bailey who
took me to Meadow Vale in evening.

June 22 Elk River to Minneapolis
Staid part of day at Elk
River and drove to
Minneapolis in afternoon.
Went to Nicollet Hotel
where arrangements were
made to meet Dr. Roberts
in morning.

Country beautiful and green
and full of wild roses and
sunflower flowers. Corn a
foot high and early potatoes
blossoming. Strawberries
ripe haying well begun.
Crops good. Farmers working
hard but for little or no
return.

June 23 St Paul &
Winneapolis.

Dr. Roberts picked me up at
Nicoll's Hotel and took me
over to University Museum
where we met Aldous and had
a long talk over game
and wild life conditions in
the state.

Saw Dr. Green and went to
lunch with him and talked
over rabbit and game studies
and diseases and saw his
laboratory and moving pictures
of rabbits.

Then saw Mr. Cox and
talked over caribou, moose,
deer and beavers with him
but Edad Suifer was away
so we could not see him.

Went out to Crow Peak and
saw the wild animals, the Elk

and buffalo were in fine condition, but several of the deer were mangy as were the woodchucks, prairie dogs and some of the foxes.

The animals are generally unprotected from sun and heat and very uncomfortable and badly housed.

Had dinner with Adams and his lovely family and caught a 7:45 train out of St Paul.

A beautiful day, country fresh and green and beautiful.

July 2nd 1897 stopped off at Wausau Wisconsin at 3 AM and ran up to Zonabawls to see the traps being made by the American Live Trap Co. but found few of practical importance being made at present. The folding live trap is their best trap and is good for muskrats, cats and small fur bearers but is expensive and complicated. Was hoping to get some line on better traps for general use.

Returned to Wausau on next train and continued to Milwaukee.

A pleasant day, rain in evening.

June 25 Arrived Chicago
8:30 AM and had to wait
till 1:40 PM for train
to Washington,
Wrote reports in Union
Station.

June 26 Arrived at Washington
8:40 AM on Capital Limited
B.O., a delightful air cooled
train with good service.

July 27 + 28, 1932

At Washington D.C.,
warm days, up to 92° and 93°,
but not uncomfortable.

In New Building.

June 30, ~~91~~ Working on reports,
Not so warm.

July 1 and 2 Finished reports
on mammals of northern
Minnesota.

July 15 Left Washington at 4:50
PM and drove to Luray by 8:30
Went through Luray Cave after
9 PM and was surprised to find
it the best cave in the east,
except that the bats are all
screened out. It is not large
or extensive but has a great
profusion of massive formations
in good condition. The colors
are all stained by yellow clay
as are all eastern caves, but
the forms are massive and old
and beautiful.

The temperature is said to be
54 all the year. There seems
to have been no original opening
but cold air coming out of the rock
led to its discovery. Not likely
to have fossils or life under
life.

July 16. Staid at a very comfortable hotel, the Minster, and got an early start for the Girl Scout Camp beyond Mt. Solon, arriving at 9:30 AM.

Was immediately called upon to catch and show a rattlesnake found in camp. Showed how his fangs worked and how the venom spurted out. Then made a good specimen of him.

Set traps and explored and caught a few other snakes. Betty had a live Eutamias in a cage; apparently the first record for Virginia.

July 28 - The Eutamias escaped on upper piazza and probably got into back yard.

July 17 - Sunday, Scout Camp
May Flather.

Went to traps but caught nothing. Set more traps and left for Betty & look after. Got a black snake.

Came back in evening to Washington, Virginia, just east of Blue Ridge and staid all night. Good roads and beautiful country.

144 miles to Girl Scout Camp
July 18. Started at 8:00 and reached Washington DC at 9:15
A beautiful morning and no traffic.

Brought a live Eutamias home for study.

July 26 Washington D.C.

No real hot weather up to present time and now delightfully cool. On several days the temperature has gone up to 92, 95 and on one day to 97° F. It generally ranges from 87 to 95, with cool nights and delightful mornings. A rain every few days cools off the air and when it gets warm again there is more rain. Some days are rather damp and steamy after the rains but generally the air is dry and pleasant.

Still many people kick about the hot weather here. I'd like to bring in just a hot day - say 112, and let them see what it is like.

Aug. 4, 1932 Washington

Read Wm M. Rush's Elk report all forenoon. It is excellent!

In P.M. went with Lindstrom and Ray & took moving pictures of bad methods of conservation, setting muskrat traps out of season and snaring rabbit. Caught the rabbit in snare but he was a big tame Belgian and not very active - Got all jiggers.

Pleasant weather, 88° maximum.

Spending no part of the afternoon
generally, and the chance of a buck
or doe having a well balanced
head. Two or three times as
many does as bucks are seen

There are certain good ones
 of the western part of Minnesota could
 by this trip. They are frequently
 along the road or back of them
 the edge of the lake and then back
 which are the best water of water
 are abundant everywhere except
 near the outlet. Still in no
 place except along the lake edge
 of Stora Lake has any other
 or one breeding from them.
 There is ample food for many
 more ducks, and would there be
 many more ducks and in places
 from there on many. The abundance
 of geese, swans, hawks, owls,
 with eagles, pin eases, bluebirds,
 hickies and a host of other
 other good ones in the mountains.

—

Aug. 5, drove from Washington
 up to Harrisonburg Va., on
 our way to the Girl Scout Camp
 and stayed all night at the
 Ashby Park Inn, a nice little
 place at the edge of town.

Aug. 6. Drove to Mt. Solon and a
 few miles beyond to the Girl Scout
 Camp, arriving at 9 AM. Saturday.
 Set traps and helped make up
 specimens. Gave talk in evening.

Aug. 7, Sunday. Caught nothing.
 Went on Nature hike with a bunch
 of the girls. Saw but little
 of interest as we did not get
 off till 11 AM. Saw one Black
 Vulture.

Left camp at 3:40 and drove
 to Washington DC at 9:15.
 144 miles. Good road of
 pleasant drive.

On morning of June 18, drove north
 of Grand Meadows to Northern Light
 Lake where as many as 13 whoose
 have been counted in one trip. (A number
 around the lakes and meadows
 were seen top of Northern Light peak.
 Moose often seen at Reardon and Quilley
 lakes. A few found dead in spring

Reception
 - Mr. M. J. Volentine, Sr. Forest Ranger,
 found two porcupines capturing
 last fall in early November
 in the Superior Hotel, Great Falls.
 The porcupine was on his back and
 the mole on his belly and that
 was operating of nothing as
 they operated. 27 was on the
 has given them a rock ledge
 in this they had a deer out
 There was a little more on the
 ground. The man with
 him reached in and broke
 up the specimens by killing
 them both with his pocket knife
 (Compass stake)
 Mr. Allen of Reardon has a photograph
 of two porcupines standing in facing position
 and he said something of making a good name,
 probably coming.

On June 15, we went out to Santa
 Fe but saw no more there, that
 morning some look to P.C. looking
 out to Colorado where the
 speak. saw two line of full
 river in lakes near the Tongue
 River and were told of that had
 been found there this morning
 there. We got the skull of an old cow
 that had died of them in March or April
 and tried to put an old bull with the
 head that had died.
 The highway at Casaca had been
 22 miles this morning, but 17, in
 trying to find it of back. Many
 tracks set with signs were seen
 but we had no anti-personnel or
 over roads.
 At Grand Malie the coming
 of June 17 we were told 15 miles
 found dead north of the highway
 one said to be murdered

Mores - Red Lake, Minn.
 Mores Lake museum in
 big swamp north of Red Lake,
 2000 ft. 3 miles, 3 miles of
 3 lakes, June 7, 1932, on the way
 from Red Lake to Helen Lake, outlet.
 Mores had our camp, on lake shore,
 and we did not have any.
 Mores out in open swamp has been
 very much of a hunter. Many tracks
 along ditches down to edge of Red
 Lake of our tracks seen in edge
 of lake near Mores' last night.
 Mores museum along Red Lake
 Rits of Mores River, now of
 Ritsville Lake of our old camp
 seen in Moresville June 15,
 One more killed June 16, was
 killed but the 3 were completely
 in pair.

Said to have been carried all over the
country north of the Canadian boundary
but was killed off many years ago.
2d mustelid, getting abundant still at
Green & Mason have one was killed
north of there about 30 years ago, the
last he knew of.

They were said to be 150 caribou
near Pingland 30 years ago.
(Mr. Foy but the number has
gone down to very few.
None are known to have been
killed in last 10 years but there
were 9 wolves in that vicinity
last week and only one of them
was taken by Geo. H. Johnson.
He saw this year.
Many reports are along the north
coast of Red Lake always get some
caribou.
Should be in game refuge.
Caribou are said to be still found near
the coast and 50 years ago they were
about 9 were seen in 1927 by
Bill Harkin, the City warden.
They are said to occasionally cross
the line into the U.S. and if we could
keep the wolves killed off we would
make some more caribou.

Western 1 Box 2 etc

Said to be 8 mths up the Red Lake,
all seen last fall & seen by
Geo. H. Johnson about 3 weeks ago and
we saw two or many tracks in
June 7, near Johnson's, & with path
of the middle of upper Red Lake.

There was the Red 12 in all in
this vicinity and we have few
more over about Pine Island, about
20 miles NE of Washburn.

Would be satisfied out with them
color now.
Tracks with of short in strong
contrast to regular tracks.

Like an open running of deep
sphygmus, & rather like a badger dog.

This call note is a great, about
like a pig, & more of course than
a deer, but as heavy as a mouse.

11035 ♀ 2004, 95, 40, 12, 6
6 ♀ 2004, 120, 17, 18, 13
7 ♂ 2004, 166, 40, 21, 13

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY.

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U. S. Department of Agriculture,

Washington, D. C.

Bureau of Biological Survey.

G. M. Engel, Com. Forestry
Walter Howard, Game Warden
Geo. H. Johnson, Keeper of Prison
Waskish, Minn., and vicinity.

